



## REMARKS

Claims 1-6 have been rejected under 35 USC 102(b) as anticipated by Gupta. The objection is respectfully traversed.

The present invention is related to an image processor provided in an apparatus, such as a printer or copier, that is able to distinguish between a character edge region and a continuous tone region or an original image and switch between tone reproduction processing accordingly. For example, when a determination is made that a target pixel is a pixel in a continuous tone region, smoothing is performed, followed by screening on the image data having undergone the smoothing.

Gupta discloses a post-processor for a decoded video sequence that includes a digital noise reduction unit and an artifact reduction unit to reduce blocking artifacts and noise in a video image. The post-processor uses both temporal and edge characteristics of the video image to enhance the displayed image. More specifically, edge detector process 520 uses a three-by-three pixel window about the current pixel, i.e. a total of nine pixels, to determine whether there is an edge of the image that goes through the current pixel. Additionally, Shade pixel check 543 transfers processing to two-dimensional filter process 544 if the filter control flag is nine, i.e. if none of the pixels in the three-by-three window have the edge flag set. If the filter control flag is less than nine, shade pixel check 543 transfers processing to continuous edge check 901.

Gupta fails, however, to disclose determining that when a target pixel is a pixel in the character edge region, the image output unit outputs image data without processing by a first processing unit, and that a second processing unit which performs edge enhancement on the image data, when it is determined that the target pixel is a pixel in the character edge region, as required by the claimed invention. Rather, in Gupta, initially edge pixel check 541 determined whether the edge flag is set for the current pixel. If the edge flag is set, the current pixel is one an edge in the image and maintains the sharpness of the edges, and edge pixels are not filtered. Upon completion of classifying the pixel process, processing in switched filter unit 330 transfers to shade pixel check 543. Shade pixel check 543 transfers processing to two-dimensional filter process 544 if the filter

control flag is nine. If the flag is less than nine, shade pixel check 543 transfers processing to continuous edge check 901. However, in Gupta, the apparatus first identifies texture and fine detail areas in the image, and uses reduction only on portions of the image that are not part of an edge (i.e. non-edge part) and not part of a texture or fine detail area. This is distinguished from the claimed invention since edge enhancement is performed on the image data when it is determined that the target pixel is a pixel in the character edge region.

Since the recited structure and method are not disclosed in the applied prior art, claims 1, 4 and 6 are patentable. Claim 5, depending from claim 4, is similarly patentable.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue. If it is determined that a telephone conference would expedite the prosecution of this application, the Examiner is invited to telephone the undersigned at the number given below.

In the event the U.S. Patent and Trademark office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 03-1952 referencing docket no.325772024400.

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